

bly explain, in part, why so many thousands of dollars were raised to secure the necessary signatures for the November initiative, and to provide funds to carry on an educational campaign necessary for its passage.<sup>†</sup>

### SUPPORT YOUR ADVERTISERS

#### We Help Ourselves by Helping Others.—

For years, on advertising page 8 of CALIFORNIA AND WESTERN MEDICINE, an "Alphabetical List of Advertisers" has been given; and there has also appeared the following footnote to the tabular list, asking readers to remember such advertising patrons:

#### COÖPERATE WITH YOUR ADVERTISERS

CALIFORNIA AND WESTERN MEDICINE, the official publication of your Association, is made possible in part by reason of the coöperation of business firms and institutions who use advertising space. Their purpose is to direct attention to their products and services to present and future patrons.

Members and readers are urged to give preference to and to patronize these advertisers. When ordering goods, mention CALIFORNIA AND WESTERN MEDICINE.

This coöperation will please the advertiser, add to advertising income, and enable your Association to increase the value of this JOURNAL to members and readers.

The truths embodied in the above text should appeal to every member of the California Medical Association. If the solicited coöperation were given generously, the reputation of the OFFICIAL JOURNAL of the California Medical Association, as a worthwhile advertising medium, would so rapidly spread among manufacturers and others who cater to the needs of the medical profession that the income from advertisements alone would greatly increase, thus making possible a lesser subscription allocation from the annual dues than has been in vogue in recent years.

\* \* \*

**United States Postal Laws Make Subscription Rate Necessary: "California and Western Medicine" Rate.**—In order to secure second-class postal rate, the United States Post Office Department demands that definite subscription rates be established for members who receive the official journals of their respective organizations. In accordance with the postal laws, the California Medical Association Council, for several years past, established the yearly subscription rate of CALIFORNIA AND WESTERN MEDICINE for Association members at three dollars, or twenty-five cents per copy. When the subscription allocation for California Medical Association members is added to the advertising income of the OFFICIAL JOURNAL, the books show a net balance in the black to the credit of CALIFORNIA AND WESTERN MEDICINE. The subscription price to nonmembers (excepting members of the Nevada State Medical Association, who also receive the JOURNAL at the three-dollar rate) is five dollars per year.

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**Coöperation with "California and Western Medicine" Advertisers Requested.**—It would

<sup>†</sup> As these comments go forward to the printer, two extremely significant items appeared in the daily press. They are reprinted in this issue on page 197.

not be a difficult task to increase the amount of advertising in CALIFORNIA AND WESTERN MEDICINE if the standards demanded of advertisers were lowered so that proprietary and other announcements could be accepted. That, however, is something that is repugnant to the policy adopted by the California Medical Association, established when it brought the OFFICIAL JOURNAL into existence in November, 1902, to take the place of the *Annual Transactions*—a policy to which the Association has striven to be loyal during the last thirty-six years. In this connection, in the first editorial that graced Volume 1, Number 1, of the OFFICIAL JOURNAL, the founder-editor, Philip Mills Jones wrote:

The CALIFORNIA STATE JOURNAL OF MEDICINE\* will hereafter take the place of the Annual Volume of Transactions of the Medical Society of the State of California. . . . In addition to the official reports of the annual meetings of the State Society, and the papers and discussions of the Scientific Section, the JOURNAL will publish a limited number of original articles, reports of county societies, and such other matter as may be of interest.

The advertising pages of the JOURNAL will be limited in number, and will be open only to advertising matter which complies with the strictly ethical standard that is so well understood by all, yet so frequently forgotten—when there is a financial reason to forget!

\* \* \*

**Members Are Urged to Read the Advertisements in the "Official Journal."**—While more could easily be written on the topic, "Support Your Advertisers," we shall rest at this point, in the hope that members of the State Association will take to heart what has been said and follow up good intentions by regularly scanning the advertising pages of CALIFORNIA AND WESTERN MEDICINE, and writing for literature and information on any and all items in which they may have interest. They may be assured that advertisers, who help make it possible to bring to each member one of the largest of the state medical journals, will appreciate their coöperation. By giving this aid, members will be helping their advertisers, their Association, and themselves. Lend a hand!

### WAGNER BILL, S. 1620: AN ILLUMINATING DIGEST OF THE REPORT OF THE SENATE COMMITTEE

On August 4, 1939, the Committee on Education and Labor of the United States Senate, which had been holding hearings on the merits and demerits of Senator Robert F. Wagner's health program bill (S. 1620), submitted a report (No. 1139) to the Seventy-Sixth Congress. Much of the testimony offered at the hearings appeared in succeeding issues of the *Journal of the American Medical Association*.

Physicians who have kept in touch with these proceedings will be interested in the analyses made and conclusions drawn by the Senate Committee on Education and Labor, as submitted by Senator Murray. The forty-two-page report is too lengthy for publication in CALIFORNIA AND WESTERN MEDICINE, but we have pleasure in reprinting, on

\* This was the original name of CALIFORNIA AND WESTERN MEDICINE, the California Medical Association at that time being known as the Medical Society of the State of California.

page 214, an excellent digest gleaned from the *Journal of the American Medical Association*.

This should be read by all members of the medical profession, because it indicates the nature of federal legislation that will, of a certainty, be proposed when the second session of the Seventy-Sixth Congress convenes in January, 1940. If some of the proposed legislation is then enacted, it may make for radical changes in medical practice. Take the time, therefore, to browse through the digest. Its perusal will be thought-stimulating.

**Other State Association and Component County Society News.**—Additional news concerning the activities and work of the California Medical Association and its component county medical societies is printed in this issue, commencing on page 178.

## EDITORIAL COMMENT†

### SPONDYLOLISTHESIS

Spondylolisthesis, or slipping of a vertebra, was first described as a clinical entity eighty-five years ago. Since that time there have been perhaps three eras during each of which a different attitude has been taken toward the fundamental nature of this condition.

The first descriptions of spondylolisthesis were of advanced cases which had been recognized in women in whom an obstruction to labor led, upon examination, to the discovery of a marked deformity of the lower spine. Physical signs were promulgated to facilitate the diagnosis of this condition before labor, and during the latter part of this epoch anteroposterior roentgenograms of the lower spine and pelvis were used to confirm this clinical diagnosis. Much attention was devoted to describing the abnormality and to clinical signs useful for the diagnosis thereof, but little was surmised or known regarding the exact origin of the displacements.

The second era was marked by two changes. The first was the development of satisfactory lateral roentgenologic projections of the lumbosacral region; the second, the advent of the automobile and an apparent increase in the incidence of the lesion. By lateral roentgen examination it became possible to determine not only that forward slipping (usually of the fifth lumbar body) had taken place, but also to measure its degree.

Accidental injuries to the lower back became more frequent because of the automobile, and also because of the increase in industrial employment following the turn of the century. Many of these accident cases were submitted to x-ray examinations and some showed various degrees of spondylolisthesis. It was only natural to assume that the injuries sustained resulted in the changes noted,

† This department of CALIFORNIA AND WESTERN MEDICINE presents editorial comments by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California Medical Association to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

and it came to be generally believed that spondylolisthesis was the result of trauma to the spine.

The third and current era consists of a period of approximately twenty years, during which considerable anatomical and clinical research upon the spine, and especially the lumbosacral region, has taken place. Anatomical studies have consisted of reviews of large series of spines and x-ray studies, especially of preemployment groups. Refinements in roentgenologic technique, such as the oblique projections of the lumbar spine, now frequently used, have aided in obtaining a truer insight into the structure and mechanics of the lower spine. These studies have led to the following conceptions regarding spondylolistheses:

1. The neural arch of the involved vertebra is usually defective as a result of anomalies occurring during development. The most common anomaly is a separation, usually bilateral, of the neural arch at the isthmus or interarticular portion; this occurs in the last lumbar segment in more than 80 per cent of cases. Furthermore, as studies of infants and young individuals have been made, it has been demonstrated that spondylolisthesis is not an unusual occurrence in these groups.

2. As a result of acute trauma or, more commonly, repeated minor injuries or long-continued strain (such as the weight of the body, occupational strains, and so forth), the musculofascial and ligamentous structures maintaining the integrity of the involved vertebra stretch or give way, allowing that portion of the vertebra anterior to the bony defect to slip forward or, more correctly, to be forced downward and forward.

3. In approximately one-third of the cases where the fifth or last lumbar body slides downward on the superior sacral surface, it also rotates on the anterosuperior edge of the first sacral segment. If this occurs, the posterosuperior margin of the last lumbar body lies anterior to the postero-inferior margin of the body above it. In no instance, however, is this to be considered a posterior displacement of the fourth on the fifth body, or a "reverse spondylolisthesis."

Since low-back pain is said to be the second most frequent complaint in the field of industrial medicine, and is a frequent concomitant of allegedly compensable injuries, and since many such cases are still being awarded large sums when a spondylolisthesis is shown to be present following the injury, it behooves us to be most cautious in affirming that the bony changes present are the result of a recent trauma. Competent roentgenologic interpretation is of fundamental importance in evaluating the lesions found in these cases, and a thorough roentgen examination must be made if errors are to be prevented. Adequate examinations can rarely be made with small office or portable units. In some instances a positive statement concerning the connection of the displacement with the recent injury must be deferred until a comparison can be made with subsequent roentgen examination, usually after an interval of from four to six weeks.

450 Sutter Street.

HAROLD ARTHUR HILL,  
San Francisco.